L Number	Hits	Search Text	DB	Time stamp
1	2827	sorensen-\$.in.	USPAT;	2004/06/28 06:37
			US-PGPUB;	
			EPO; JPO;	
			DERWENT	
2	5095	larsen-\$.in.	USPAT;	2004/06/28 06:37
			US-PGPUB;	
			ЕРО, ЛРО,	
			DERWENT	
3	1349	johansen-\$.in.	USPAT;	2004/06/28 06:37
			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT	
5	9218	sorensen-\$.in. or larsen-\$.in. or johansen-\$.in.	USPAT;	2004/06/28 06:37
			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT	
4	1	sorensen-\$.in. and larsen-\$.in. and johansen-\$.in.	USPAT;	2004/06/28 06:38
			US-PGPUB;	
			EPO; JPO;	
			DERWENT	
6	16	cua with (anticodon or anti-codon)	USPAT;	2004/06/28 06:53
			US-PGPUB;	
			EPO; JPO;	
			DERWENT	
7	2	(cua with (anticodon or anti-codon)) and (sorensen-\$.in. or	USPAT;	2004/06/28 06:38
		larsen-\$.in. or johansen-\$.in.)	US-PGPUB;	
			EPO; JPO;	
			DERWENT	
11	1	"dsm 12086" or "dsm 12109" or "chcc4146" or "FA4-1-1"	USPAT;	2004/06/28 06:47
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
10	27	"DSM 12087" or pfg1 or pfg-1 or pfg1.1 or pfg-1.1	USPAT;	2004/06/28 06:49
			US-PGPUB;	
			ЕРО; ЈРО;	
		W.1. 48000W	DERWENT	
12	1	"dsm 12088"	USPAT;	2004/06/28 06:49
			US-PGPUB;	
			ЕРО; ЈРО;	
12	2		DERWENT	2004/06/20 06 50
13	3	pfg1.1 or pfg-1.1	USPAT;	2004/06/28 06:50
			US-PGPUB;	
			EPO; JPO;	
14	0	"DSM 12091" or "dsm 12108"	DERWENT	2004/06/20 06:50
14	U	DOM 1704 OF ORM 17109	USPAT;	2004/06/28 06:50
			US-PGPUB;	
			EPO; JPO;	
15	1	pFG100 or pFG-100 or pFG200 or pFG-200	DERWENT	2004/06/28 06:52
15	1	protot of pro-too of prozoo of pro-200	USPAT; US-PGPUB;	2004/00/28 00.32
			EPO; JPO;	
			DERWENT	
16	7473	lactococc\$4 or lactis	USPAT;	2004/06/28 06:52
10	1713	THE CONTRACTOR IN THE PROPERTY OF THE PROPERTY	US-PGPUB;	2007/00/20 00.32
			EPO; JPO;	
			DERWENT	
17	2	(cua with (anticodon or anti-codon)) and (lactococc\$4 or lactis)	USPAT;	2004/06/28 06:52
* /	4	(vaa min (annoodon of ann-oodon)) and (lactococcos of lactis)	US-PGPUB;	2007100120 00.JZ
			EPO; JPO;	
			DERWENT	
			DUCATION	

18	11	cua with suppressor	USPAT;	2004/06/28 06:53
		• •	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
19	2	(cua with suppressor) and (lactococc\$4 or lactis)	USPAT;	2004/06/28 06:54
		•	US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
20	376	amber with suppressor	USPAT;	2004/06/28 06:54
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	
21	29	(amber with suppressor) and (lactococc\$4 or lactis)	USPAT;	2004/06/28 06:54
			US-PGPUB;	
			ЕРО; ЈРО;	
			DERWENT	
22	4	(amber with suppressor) same (lactococc\$4 or lactis)	USPAT;	2004/06/28 06:54
			US-PGPUB;	
			ЕРО; ЛРО;	
			DERWENT	

L5 ANSWER 1 OF 3 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2000208815 MEDLINE DOCUMENT NUMBER: PubMed ID: 10742196

TITLE: A food-grade cloning system for industrial strains of

Lactococcus lactis.

AUTHOR: Sorensen K I; Larsen R; Kibenich A;

Junge M P; Johansen E

CORPORATE SOURCE: Department of Genetics and Microbiology, Chr. Hansen A/S,

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SOURCE: Applied and environmental microbiology, (2000 Apr) 66 (4)

1253-8.

Journal code: 7605801. ISSN: 0099-2240.

PUB. COUNTRY: United States

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LANGUAGE: English

FILE SEGMENT: Priority Journals OTHER SOURCE: GENBANK-AF174425

ENTRY MONTH: 200005

ENTRY DATE: Entered STN: 20000518

Last Updated on STN: 20000518 Entered Medline: 20000511

We have previously reported the construction of a food-grade cloning AB vector for Lactococcus using the ochre suppressor, supB, as the selective marker. This vector, pFG1, causes only a slight growth inhibition in the laboratory strain MG1363 but is unstable in the industrial strains tested. As supB suppresses both amber and ochre stop codons, which are present in 82% of all known lactococcal genes, this undesirable finding may result from the accumulation of elongated mistranslated polypeptides. Here, we report the development of a new food-grade cloning vector, pFG200, which is suitable for overexpressing a variety of genes in industrial strains of Lactococcus lactis. The vector uses an amber suppressor, supD, as selectable marker and consists entirely of Lactococcus DNA, with the exception of a small polylinker region. Using suppressible pyrimidine auxotrophs, selection and maintenance are efficient in any pyrimidine-free medium including milk. Importantly, the presence of this vector in a variety of industrial strains has no significant effect on the growth rate or the rate of acidification in milk, making this an ideal system for food-grade modification of industrially relevant L. lactis strains. The usefulness of this system is demonstrated by overexpressing the pepN gene in a number of industrial backgrounds.

## (FILE 'HOME' ENTERED AT 07:04:37 ON 28 JUN 2004)

=>

	FILE 'MEDL'	INE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 07:05:03 ON 28 JUN 2004
L1	23010	S (SORENSEN, ?)/IN,AU
L2	38651	S (LARSEN, ?)/IN,AU
<b>L</b> 3	12679	S (JOHANSEN, ?)/IN,AU
L4		S L1 AND L2 AND L3
L5		DUPLICATE REMOVE L4 (3 DUPLICATES REMOVED)
L6		S L1 OR L2 OR L3
ь7		S (AMBER OR CUA) (S) SUPPRESSOR
Γ8		S (AMBER OR CUA) (S) SUPPRESSOR
ь9	343	S (AMBER OR CUA) (S) ANTICODON
L10	1860	S L8 OR L9
L11		S L10 AND L6
L12		S LACTOCOCC? OR LACTIS
L13		S L11 AND L12
L14		DUPLICATE REMOVE L13 (6 DUPLICATES REMOVED)
L15	=	S L14 NOT L4
L16	_	S PFG100 OR PFG-100
L17		DUPLICATE REMOVE L16 (2 DUPLICATES REMOVED)
L18		S PFG200 OR PFG-200
L19		DUPLICATE REMOVE L18 (3 DUPLICATES REMOVED)
L20	0	S L19 NOT L5